

# Claims

- [c1] A method for drilling at least one wellbore from an off-site location, the at least one wellbore located at a wellsite having a drilling rig with a downhole drilling tool suspended therefrom, comprising:
  - selectively advancing the downhole drilling tool into the earth to form the at least one wellbore, the downhole drilling tool operated according to a wellsite setup;
  - collecting wellsite parameters from a plurality of sensors positioned about the wellsite;
  - transmitting at least a portion of the wellsite parameters to an offsite control center;
  - performing an analysis of the wellsite parameters; and
  - automatically adjusting the wellsite set up from the off-site center based on the analysis of the wellsite parameters.
- [c2] The method of claim 1, further comprising manually adjusting the wellsite setup at the wellsite.
- [c3] The method of claim 1, further comprising automatically adjusting the wellsite setup at the wellsite.
- [c4] The method of claim 3, wherein the automatic adjust-

ments are made by one of a surface control unit, a downhole control unit and combinations thereof.

- [c5] the method of claim 1, wherein at least a portion of the sensors are positioned about one of a surface system of the wellsite, a downhole system of the wellsite, the wellbore and an adjacent formation and combinations thereof.
- [c6] the method of claim 1, further comprising establishing an offsite communication link between the offsite control center and the wellsite.
- [c7] The method of claim 6, wherein the offsite communication link is between the offsite control center and a surface control unit at the wellsite.
- [c8] The method of claim 7, further comprising establishing an onsite communication link between the surface control unit and one of a surface system of the wellsite, a downhole system of the wellsite, and combinations thereof.
- [c9] the method of claim 6, wherein the offsite communication link is between the offsite control center and the downhole tool.
- [c10] the method of claim 1, further comprising establishing a

wellsite communication link between one or more wellsites.

- [c11] the method of claim 1, further comprising deploying a downhole tool into the wellbore.
- [c12] the method of claim 11, wherein at least a portion of the sensors are positioned about the downhole tool.
- [c13] the method of claim 11, wherein the drilling tool is removed prior to deploying the downhole tool, and reinserted after the removal of the downhole tool.
- [c14] the method of claim 11, wherein the downhole tool is one of a wireline tool, a coiled tubing tool, a rapid formation tester tool, an electromagnetic tool and combinations thereof.
- [c15] the method of claim 1, wherein the parameters are transmitted via one of satellite, cable, telecommunication lines, internet, radio, microwaves and combinations thereof.
- [c16] the method of claim 1, wherein the transmitting and adjusting steps are performed in real time.
- [c17] The method of claim 1, wherein the transmitting and adjusting steps are performed at intervals.

- [c18] The method of claim 1, wherein the drilling tool is one of a measurement while drilling tool, a logging while drilling tool, a wireline drilling tool, a casing drilling tool and combinations thereof.
- [c19] system for drilling a wellbore from an offsite location, comprising:
  - at least one wellsite, comprising:
    - a drilling assembly comprising a drilling tool suspended from a rig via a drill string, the drilling tool having a bit at a downhole end thereof adapted to advance into the earth to form the wellbore;
    - a plurality of sensors disposed about the at least one wellsite, the sensors adapted to collect wellsite parameters; and
    - a wellsite transceiver for sending signals from and receiving signals at the at least one wellsite;
  - an offsite control center, comprising:
    - an offsite transceiver for sending signals from and receiving signals at the offsite location;
    - an offsite processor adapted to generate an analysis of the wellsite parameters and make decisions in response thereto; and
    - an offsite controller adapted to automatically adjust the wellsite setup according to the analysis of the wellsite parameters; and

an offsite communication link between the wellsite and offsite transceivers for passing signals therebetween.

- [c20] The system of claim 19, wherein the wellsite further comprising a processor adapted to analyze the wellsite parameters and make decisions in response thereto.
- [c21] The system of claim 19, wherein the wellsite further comprises a surface control unit adapted to adjust the wellsite setup.
- [c22] The system of claim 21, wherein the surface control unit automatically adjusts the wellsite setup.
- [c23] The system of claim 21, wherein the surface control unit manually adjusts the wellsite setup.
- [c24] The system of claim 19, wherein the wellsite further comprises a surface system and a downhole system, the downhole drilling tool forming at least a portion of the downhole system.
- [c25] The system of claim 24, further comprising a surface communication link between the surface system and the downhole system.
- [c26] The system of claim 24, wherein the wellsite transceiver is positioned at one of the surface system, the downhole system and combinations thereof.

- [c27] the system of claim 19, wherein the offsite center further comprises at least one monitor for displaying the wellsite parameters.
- [c28] the system of claim 19, further comprising a communication link between transceivers at one or more wellsites for passing signals therebetween.
- [c29] the system of claim 19, wherein the offsite communication link comprises one of satellite, cable, telecommunication lines, internet, radio, microwaves and combinations thereof.
- [c30] the system of claim 19, wherein the at least one wellsite further comprises a downhole tool positionable in the wellbore, at least a portion of the sensors disposed about the downhole tool.
- [c31] The system of claim 30, wherein the downhole tool is one of a wireline tool, a coiled tubing tool, a rapid formation tester tool, an electromagnetic tool and combinations thereof.
- [c32] The method of claim 19, wherein the drilling tool is one of a measurement while drilling tool, a logging while drilling tool, a wireline drilling tool, a casing drilling tool and combinations thereof.

- [c33] method for drilling at least one wellbore at a wellsite from an offsite location, comprising:
  - selectively operating at least one drilling tool according to a wellsite setup to form the at least one wellbore;
  - collecting wellsite parameters from a plurality of sensors positioned about the at least one wellsite;
  - selectively adjusting the wellsite setup at the wellsite via a wellsite control unit;
  - transmitting at least a portion of the wellsite parameters from the wellsite to an offsite control center;
  - automatically adjusting the wellsite setup at the offsite control center based on an analysis of the wellsite parameters.
- [c34] the method of claim 33, further comprising manually adjusting the wellsite setup at the wellsite.
- [c35] the method of claim 33, further comprising automatically adjusting the wellsite setup at the wellsite.